November 2, 2009

Charles L.A. Terreni
Chief Clerk and Administrator
South Carolina Public Service Commission
Post Office Drawer 11649
Columbia, South Carolina 29211

Re: Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc.
Power Plant Performance Report
Docket No. 2006-224-E

Dear Mr. Terreni:

Enclosed is the Power Plant Performance Report for Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc. for the month of September 2009.

Sincerely,

/s/

Len S. Anthony
General Counsel
Progress Energy Carolinas, Inc.

LSA/dhs
Enclosures
45612

c: John Flitter (ORS)

September 2009

The following units had no off-line outages during the month of September:

Harris Unit 1
Robinson Unit 2
Mayo Unit 1
Roxboro Unit 3
Roxboro Unit 4

September 2009

Brunswick Unit 1

Full Forced Outage

A. Duration: The unit was taken out of service at 22:22 on September 20, and was offline for the remainder of the month. The unit was offline for 241 hours and 38 minutes during the month of September.

B. Cause: The unit was removed from service as required by Technical Specification 3.8.1, Condition H due to the inoperability of Diesel Generator #4 lasting longer than seven days.

C. Explanation: After conclusion of scheduled standard preventative maintenance on Diesel Generator #4 and during the required post-maintenance testing, a problem with the electro-mechanical governor was discovered. The problem with the governor could not be satisfactorily resolved and tested within the remaining time in the seven-day Limited Condition of Operation (LCO). As a result, the unit had to be shut down as required by Technical Specification 3.8.1.

   Investigation has yielded that the most likely cause of the electro-mechanical governor failure was from a small metallic flake (approximately the size of a speck of pepper). Although the investigation is not complete, the most probable cause is the metallic flake was introduced during vendor-performed maintenance activities.

D. Corrective Action: After detailed testing on a spare governor, the spare was installed. At the end of the month, corrective maintenance and testing was nearing completion.

September 2009

Brunswick Unit 2

Full Forced Outage

A. Duration: The unit was taken out of service at 4:21 on September 21, and was offline for the remainder of the month. The unit was offline for 235 hours and 39 minutes during the month of September.

B. Cause: The unit was removed from service as required by Technical Specification 3.8.1, Condition H due to the inoperability of Diesel Generator #4 lasting longer than seven days.

C. Explanation: After conclusion of scheduled standard preventative maintenance on Diesel Generator #4 and during the required post-maintenance testing, a problem with the electro-mechanical governor was discovered. The problem with the governor could not be satisfactorily resolved and tested within the remaining time in the seven-day Limited Condition of Operation (LCO). As a result, the unit had to be shut down as required by Technical Specification 3.8.1.

   Investigation has yielded that the most likely cause of the electro-mechanical governor failure was from a small metallic flake (approximately the size of a speck of pepper). Although the investigation is not complete, the most probable cause is the metallic flake was introduced during vendor-performed maintenance activities.

D. Corrective Action: After detailed testing on a spare governor, the spare was installed. At the end of the month, corrective maintenance and testing was nearing completion.

September 2009

Roxboro Unit 2

Full Forced Outage

A. Duration: The unit was taken out of service at 20:11 on September 20, and was returned to service at 22:48 on September 22, a duration of 50 hours and 37 minutes.

B. Cause: Boiler Tube Leak

C. Explanation: The unit was taken out of service to investigate and repair a tube leak in the waterwall section of the boiler.

D. Corrective Action: Weld repairs were made to correct the tube leak, and the unit was returned to service.

Full Forced Outage

A. Duration: The unit was taken out of service at 20:13 on September 24, and was returned to service at 4:57 on September 26, a duration of 32 hours and 44 minutes.

B. Cause: Boiler Tube Leak

C. Explanation: The unit was taken out of service to investigate and repair a tube leak in the waterwall section of the boiler.

D. Corrective Action: Weld repairs were made to correct the tube leak, and the unit was returned to service.

	Month of September 2009		Twelve Month Summary		See Notes*
MDC	938	MW	938	MW	1
Period Hours	720	HOURS	8,760	HOURS	
Net Generation	445,366	MWH	7,836,232	MWH	2
Capacity Factor	65.94	%	95.37	%	
Equivalent Availability	65.75	%	93.72	%	
Output Factor	99.25	%	100.81	%	
Heat Rate	10,585	BTU/KWH	10,432	BTU/KWH	

	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	123,816	1.51	3
Partial Scheduled	194	0.03	37,062	0.45	4
Full Forced	226,652	33.56	319,858	3.89	5
Partial Forced	4,453	0.66	35,931	0.44	6
Economic Dispatch	0	0.00	0	0.00	7
Possible MWH	675,360		8,216,880		8

* See 'Notes for Nuclear Units' filed with the January 2009 report.
** Gross of Power Agency

	Month of September 2009		Twelve Month Summary		See Notes*
MDC	920	MW	924	MW	1
Period Hours	720	HOURS	8,760	HOURS	
Net Generation	449,456	MWH	6,257,753	MWH	2
Capacity Factor	67.85	%	77.29	%	
Equivalent Availability	66.96	%	76.19	%	
Output Factor	100.86	%	98.30	%	
Heat Rate	10,693	BTU/KWH	10,638	BTU/KWH	

	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	1,336,484	16.51	3
Partial Scheduled	0	0.00	45,307	0.56	4
Full Forced	216,798	32.73	389,175	4.81	5
Partial Forced	2,071	0.31	157,027	1.94	6
Economic Dispatch	0	0.00	0	0.00	7
Possible MWH	662,400		8,096,430		8

* See 'Notes for Nuclear Units' filed with the January 2009 report.
** Gross of Power Agency

	Month of September 2009		Twelve Month Summary		See Notes*
MDC	900	MW	900	MW	1
Period Hours	720	HOURS	8,760	HOURS	
Net Generation	657,569	MWH	7,512,229	MWH	2
Capacity Factor	101.48	%	95.28	%	
Equivalent Availability	99.83	%	93.04	%	
Output Factor	101.48	%	101.67	%	
Heat Rate	10,835	BTU/KWH	10,729	BTU/KWH	

	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	495,270	6.28	3
Partial Scheduled	0	0.00	52,237	0.66	4
Full Forced	0	0.00	0	0.00	5
Partial Forced	1,121	0.17	1,224	0.02	6
Economic Dispatch	0	0.00	0	0.00	7
Possible MWH	648,000		7,884,000		8

* See 'Notes for Nuclear Units' filed with the January 2009 report.
** Gross of Power Agency

	Month of September 2009		Twelve Month Summary		See Notes*
MDC	710	MW	710	MW	1
Period Hours	720	HOURS	8,760	HOURS	
Net Generation	530,671	MWH	5,514,859	MWH	2
Capacity Factor	103.81	%	88.67	%	
Equivalent Availability	100.00	%	84.30	%	
Output Factor	103.81	%	104.54	%	
Heat Rate	10,821	BTU/KWH	10,725	BTU/KWH	

	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	697,267	11.21	3
Partial Scheduled	0	0.00	28,778	0.46	4
Full Forced	0	0.00	247,080	3.97	5
Partial Forced	0	0.00	3,299	0.05	6
Economic Dispatch	0	0.00	0	0.00	7
Possible MWH	511,200		6,219,600		8

* See 'Notes for Nuclear Units' filed with the January 2009 report.

	Month of September 2009		Twelve Month Summary		See Notes*
MDC	742	MW	742	MW	1
Period Hours	720	HOURS	8,760	HOURS	
Net Generation	217,230	MWH	3,863,947	MWH	2
Capacity Factor	40.66	%	59.45	%	
Equivalent Availability	100.00	%	86.38	%	
Output Factor	67.95	%	70.02	%	
Heat Rate	10,600	BTU/KWH	10,704	BTU/KWH	

	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	706,929	10.88	3
Partial Scheduled	0	0.00	83,502	1.28	4
Full Forced	0	0.00	59,928	0.92	5
Partial Forced	0	0.00	35,074	0.54	6
Economic Dispatch	317,010	59.34	1,750,539	26.93	7
Possible MWH	534,240		6,499,920		8

* See 'Notes for Fossil Units' filed with the January 2009 report.
** Gross of Power Agency

	Month of September 2009		Twelve Month Summary		See Notes*
MDC	662	MW	664	MW	1
Period Hours	720	HOURS	8,760	HOURS	
Net Generation	328,372	MWH	4,219,424	MWH	2
Capacity Factor	68.89	%	72.51	%	
Equivalent Availability	87.78	%	85.59	%	
Output Factor	77.91	%	83.52	%	
Heat Rate	9,053	BTU/KWH	8,774	BTU/KWH	

	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	433,286	7.45	3
Partial Scheduled	0	0.00	49,024	0.84	4
Full Forced	55,178	11.58	278,518	4.79	5
Partial Forced	3,078	0.65	78,805	1.35	6
Economic Dispatch	90,012	18.88	759,944	13.06	7
Possible MWH	476,640		5,818,830		8

* See 'Notes for Fossil Units' filed with the January 2009 report.

	Month of September 2009		Twelve Month Summary		See Notes*
MDC	695	MW	698	MW	1
Period Hours	720	HOURS	8,760	HOURS	
Net Generation	294,711	MWH	4,133,746	MWH	2
Capacity Factor	58.90	%	67.65	%	
Equivalent Availability	99.68	%	95.20	%	
Output Factor	58.90	%	69.17	%	
Heat Rate	10,754	BTU/KWH	10,642	BTU/KWH	

	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	116,559	1.91	3
Partial Scheduled	510	0.10	94,401	1.54	4
Full Forced	0	0.00	11,996	0.20	5
Partial Forced	1,067	0.21	70,663	1.16	6
Economic Dispatch	204,112	40.79	1,682,925	27.54	7
Possible MWH	500,400		6,110,100		8

* See 'Notes for Fossil Units' filed with the January 2009 report.

	Month of September 2009		Twelve Month Summary		See Notes*
MDC	698	MW	698	MW	1
Period Hours	720	HOURS	8,760	HOURS	
Net Generation	349,424	MWH	4,396,991	MWH	2
Capacity Factor	69.53	%	71.91	%	
Equivalent Availability	99.44	%	94.12	%	
Output Factor	69.53	%	75.21	%	
Heat Rate	11,885	BTU/KWH	11,236	BTU/KWH	

	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	268,299	4.39	3
Partial Scheduled	0	0.00	25,337	0.41	4
Full Forced	0	0.00	0	0.00	5
Partial Forced	2,808	0.56	65,878	1.08	6
Economic Dispatch	150,328	29.91	1,357,974	22.21	7
Possible MWH	502,560		6,114,480		8

* See 'Notes for Fossil Units' filed with the January 2009 report.
** Gross of Power Agency

Run Date 10/19/2009

Plant	Unit	Current MW Rating	January 2008 - December 2008	September 2009	January 2009 - September 2009
Asheville	1	191	67.84	63.01	72.54
Asheville	2	185	64.83	50.91	60.70
Cape Fear	5	144	69.98	36.68	67.56
Cape Fear	6	172	61.62	49.30	63.38
Lee	1	74	62.88	8.04	50.06
Lee	2	77	50.49	19.74	43.09
Lee	3	246	38.21	40.76	62.12
Mayo	1	742	62.59	40.66	59.46
Robinson	1	174	65.88	63.35	58.85
Roxboro	1	369	69.79	54.96	81.05
Roxboro	2	662	78.24	68.89	74.21
Roxboro	3	695	66.00	58.90	66.74
Roxboro	4	698	70.32	69.53	71.81
Sutton	1	93	46.46	23.75	38.20
Sutton	2	104	55.49	26.54	43.77
Sutton	3	403	56.73	59.52	53.80
Weatherspoon	1	48	42.83	19.30	13.72
Weatherspoon	2	49	41.04	13.48	15.59
Weatherspoon	3	75	56.58	15.99	24.79
Fossil System Total		5,201	64.48	53.00	63.64
Brunswick	1	938	85.33	65.94	96.89
Brunswick	2	920	95.43	67.85	72.36
Harris	1	900	98.94	101.48	92.70
Robinson Nuclear	2	710	87.02	103.81	104.30
Nuclear System Total		3,468	91.90	83.42	90.81
Total System		8,669	75.45	65.17	74.51

Amended SC Fuel Rule
Related to Nuclear Operations

There shall be a rebuttable presumption that an electrical utility made every reasonable effort to minimize cost associated with the operation of its nuclear generation system if the utility achieved a net capacity factor of ≥ 92.5% during the 12 month period under review. For the test period April 1, 2009 through September 30, 2009, actual period to date performance is summarized below:

Period to Date: April 1, 2009 to September 30, 2009

Nuclear System Capacity Factor Calculation (Based on net generation)

A.. Nuclear system actual generation for SCPSC test period	A =	13,622,322 MWH
B. Total number of hours during SCPSC test period	B =	4,342 hours
C. Nuclear system MDC during SCPSC test period (see page 2)	C =	3,468 MW
D. Reasonable nuclear system reductions (see page 2)	D =	1,848,979 MWH

A. SC Fuel Case nuclear system capacity factor: [(A + D) / (B + C)] * 100 = 101.6%

NOTE:
If Line Item E > 92.5%, presumption of utility's minimum cost of operation.
If Line Item E < 92.5%, utility has burden of proof of reasonable operations.

Amended SC Fuel Rule
Nuclear System Capacity Factor Calculation
Reasonable Nuclear System Reductions
Period to Date: April 1, 2009 to September 30, 2009

Nuclear Unit Name and Designation	BNP Unit # 1	BNP Unit # 2	HNP Unit # 1	RNP Unit # 2	Nuclear System
Unit MDC	938 MW	920 MW	900 MW	710 MW	3,468 MW
Reasonable refueling otuage time (MWH)	0	632,331	495,270	0	
Reasonable maintenance, repair, and equipment replacement outage time (MWH)	251,582	355,106	1,122	36,212	
Reasonable coast down power reductions (MWH)	0	0	24,856	0	
Reasonable power ascension power reductions (MWH)	0	20,440	20,300	0	
Prudent NRC required testing outages (MWH)	6,037	5,723	0	0	
SCPSC identified outages not directly under utility control (MWH)	0	0	0	0	
Acts of Nature reductions (MWH)	0	0	0	0	
Reasonable nuclear reduction due to low system load (MWH)	0	0	0	0	
Unit total excluded MWH	257,619	1,013,600	541,548	36,212	
Total reasonable outage time exclusions [carry to Page 1, Line D]					1,848,979